

***Remarks***

Reconsideration of this Application is respectfully requested.

Claims 6-9 are pending in the application, with claim 6 being the independent claim.

Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

***Telephone Interview and New Information***

Applicants sincerely thank the Examiner for the informative telephone interview that shed light on the issues. For the first time, Applicants learned of the calculation which is the basis for the Examiner's allegation that the data show only an additive effect and not a synergistic one. Hence, Applicants were precluded from earlier submitting the specific arguments presented herein to rebut the Examiner's underlying reasoning for using the calculation.

***Rejections under 35 U.S.C. § 103***

Applicants understanding from the above telephone interview is that the Examiner maintains that the data in the specification do not show a synergistic effect, but does not maintain that the present claims are obvious in view of the art of record.

***Synergistic Effect***

During the December 22, 2006 telephone interview, the Examiner described the calculation used to conclude that the data reflects an additive effect and not a synergistic one. The calculation used by the Examiner can be summarized as the sum of the efficacies at the ratios found in the composition divided by the number of components in

the composition. Further, the Examiner alleged that the specification's data are confusing. Applicants submit the following remarks to clarify any confusion.

For background, Applicants note:

1. An additive effect is the combined effect of two or more chemicals equal to the sum of the effects components would have if acting alone. Definition available from the Environmental Protection Agency ("EPA") website at [http://iaspub.epa.gov/trs/trs\\_proc\\_qry.alphabet?p\\_term\\_nm=A](http://iaspub.epa.gov/trs/trs_proc_qry.alphabet?p_term_nm=A). Whereas a synergistic effect is an effect whereby two toxic substance together have more of an impact than anticipated. Definition available from the EPA website at [http://iaspub.epa.gov/trs/trs\\_proc\\_qry.alphabet?p\\_term\\_nm=S](http://iaspub.epa.gov/trs/trs_proc_qry.alphabet?p_term_nm=S);

2. The data at page 11 in the specification shows that when acting alone at an application rate of 100 g/ha, each individual component, trifloxystrobin, prothioconazole and tebuconazole of the composition has a percent efficacy of 67, 56 and 22, respectively; and

3. In the composition, these components are present in the amount of 10 parts trifloxystrobin, 8.5 parts prothioconazole and 10 parts tebuconazole, *i.e.* 10:8.5:10, which is simply another way of stating the 0.35/0.30/0.35 ratio for the contribution of each component to the whole.<sup>1</sup>

Applicants assert that on its face the Examiner's calculation described above cannot be correct for calculating an additive sum, which is the simple sum of the effect the components would have if acting alone.

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<sup>1</sup>  $10 + 8.5 + 10 = 28.5$  parts total.  $10/28.5 = 0.35$ ;  $8.5/28.5 = 0.30$ ; and  $10/28.5 = 0.35$

In a .35/.30/.35 (10:8.5:10) three-component composition applied at 100 g/ha, each individual component is actually present at *less than 100 g/ha*, but together add up to 100 g/ha. Therefore, to correctly determine the additive effect of a .35/.30/.35 (10:8.5:10) three-component composition, each component's contribution to the whole *must* first be proportionately weighted by simply factoring in the amount in which it is present in the whole. To do this, the amount of each component as a ratio of the whole is multiplied by the component's percent efficacy at 100 g/ha. Thus, individually, trifloxystrobin contributes [.35 x 67%], *i.e.*, 23%; prothioconazole contributes [.30 x 56%], *i.e.*, 17%; and tebuconazole contributes [.35 x 22%], *i.e.*, 8.0%, to the composition's efficacy when the composition is applied at 100 g/ha.<sup>2</sup> As described above, the additive effect is the simple sum of the individual components. The sum of 23, 17 and 8.0 is 48. See Table 1 below.

TABLE 1

0.35:0.30:0.35			
Parts/Components (3)	Amount Present in Composition	[Ratio]	[Individual Efficacy per 100g] = Individual Contribution to Efficacy in 100g of 3 Component Composition
10 / trifloxystrobin:	35g	0.35	67% 23%
8.5 / prothioconazole:	30g	0.30	56% 17%
10 / tebuconazole:	35g	0.35	22% 8.0%
Total: 28.5 parts	100g	1.00	N/A 48% Additive Effect

The calculated additive effect is 48% efficacy, whereas the measured efficacy reported at page 11 in the specification is 78%. As described above, a synergistic effect is shown when substances have an effect which is greater than expected. Thus, the claimed composition possesses a synergistic effect.

<sup>2</sup> This calculation gives the highest possible value for individual efficacy. The calculation is based on the precondition that a linear dose-efficacy-response exists. Generally, however, the efficacies of lower doses are not linear, but instead reach a point whereby no significant efficacy is observed at all. Thus, the additive effect calculated herein from the individual efficacies is the highest value attainable, which is still 30% lower than the measured synergistic effect.

For the reasons set forth in Applicants' previous replies, and in view of the arguments presented above, Applicants respectfully submit that the data shows that the measured efficacy is greater than the calculated additive effect and, therefore, is a synergistic effect. Reconsideration and withdrawal of the outstanding rejection is earnestly solicited.

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***Conclusion***

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the Final Office Action dated July 27, 2006 and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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